

MAR 13 2009

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AP190HO

PATENT

**FOR DISCUSSION PURPOSES ONLY**

**PLEASE DO NOT ENTER**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant(s): William Chen      Art Unit: 2621  
Serial No.: 10/783,696      Examiner: Anand Shashikant Rao  
Filed: February 20, 2004      Confirmation No.: 1789  
Title: Video Codec System with Real-Time Complexity Adaptation and  
Region-of-Interest Coding

**TO: EXAMINER RAO**

**FAX NO.: (571) 273-8300**

**FROM: MIKE GABRIK**

**RE: PROPOSED AMENDMENTS IN  
RESPONSE TO OFFICE ACTION  
DATED DECEMBER 23, 2008**

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Response B After Final Rejection

**AMENDMENTS TO CLAIMS:**

The listing of claims will replace all prior versions, and listings of claims in the application:

**LISTING OF CLAIMS:**

1. (Currently Amended) A method for adapting the number of encoded bits produced by a codec to a system target bit-rate, comprising:

determining if the system target bit-rate is such that bits-per-macroblock is less than a fixed predetermined number,

if not,

setting the frequency at which intra-coded frames are sent to a first fixed predetermined frequency range,

allocating bits between intra-coded frames and inter-coded frames according to a first predetermined allocation factor, and

adjusting quantizer step sizes for the intra-coded and inter-coded frames,

if so,

setting the frequency at which intra-coded frames are sent to a second fixed predetermined frequency range that is lower than the first fixed predetermined frequency range, unless there is a motion vector is found in each of more than a predetermined percentage of the macroblocks, in which case the sending frequency of the intra-coded frames is set to the first fixed predetermined frequency range, and

setting to zero transform coefficients having a zig-zag index greater than or equal to a preset number in select luminance intra-coded frame transform coefficient blocks and not in other frame transform coefficient blocks, wherein said select intra-coded frame transform coefficient blocks are identified by a predefined criteria having a DC transform coefficient whose value exceeds a fixed predetermined number.

2. (Currently Amended) A method as recited in claim 1, ~~wherein the criteria for identifying said select intra-coded frame transform coefficient blocks include (i) each luminance block with a DC transform coefficient whose value exceeds a fixed predetermined number and (ii) further comprising setting to zero transform~~